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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/599,963

04/24/2007

Giora Kornblau

34292

7410

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11/05/2009

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EXAMINER

VANORE, DAVID A

ART UNIT

PAPER NUMBER

2881

MAIL DATE

DELIVERY MODE

11/05/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	10/599,963		KORNBLAU ET AL.	
	Examiner		Art Unit	
	DAVID A. VANORE		2881	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16, 26, 27 and 34-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15, 16, 26, 27 and 34-36 is/are rejected.
- 7) ☒ Claim(s) 14 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 April 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :6/14/09,8/6/08,1/30/08,9/13/07,2/07/07.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of claims 1-16 and 34-36 in the reply filed on September 24, 2009 is acknowledged. The traversal is on the ground(s) that claims 26 and 27 belong in Group I. This is found persuasive. Claims 26 and 27 will be examined with the claims of Group I.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-5, 7, 11-13, 15, and 34-36 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by USPN 6,696,686 to Wainer et al.

4. Regarding claim 1, 3-4, and 34-36, Wainer et al. teaches a computerized tracking system including first, second, and third sensor modules (Item 20) which include pixilated arrays for detector regions (Col. 1 Lines 34-58) and a computer coupled to each sensor (Note Col. 4 Lines 56-62).

5. Regarding claims 2 and 15, the radiation source is a radio-isotope contained in a portion of a patient body attached to the device (Col. 1 Lines 10-19).

6. Regarding claim 5, the apparatus of Wainer et al. includes a means to selectively tilt or translate each detector surface to a desired angular orientation with respect to the source/patient (Col. 4 Lines 63-68).

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7. Regarding claim 7, the computer of Wainer et al. constructs an image out of the detected data and therefore includes an imaging module (Col. 5).

8. Regarding claims 11-12, the computer receives data from each pixel of the pixilated detector which satisfies the requirement to have 2, 3, or more output signals coupled to the computer system.

9. Claim 13 fails to further limit the structure of claim 12 and is rejected on the same grounds.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wainer et al. cited above in view of USPN 6,033,721 to Nassuphis.

12. Wainer et al. teaches all the required limitations of claim 5, but fails to teach explicitly that the computer controls the translation of the detectors described in Wainer et al.

13. Nassuphis teaches a control system including a motion control system and image processor (Note Fig. 1 and its associated discussion in the specification) which are operably contained in the same computer control unit.

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14. Nassuphis remedies the lack of teaching in Wainer et al. by providing an integrated computer control system which performs image processing and component motion control operations.

15. It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the Nassuphis and Wainer et al. invention because the use of a central computer to perform the control and operation of an imaging device would be an obvious use of convention components and the components of Wainer et al. Computers are advantageously employed in the prior art as an interface and control system for complex devices enabling both device control and data processing to be conducted on a single platform.

16. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wainer et al. cited above in view of USPN 4,755,680 to Logan.

17. Wainer et al. teaches the required elements of claims 1 and 7, but fails to explicitly disclose that the computer which generates the image using data acquired includes a display.

18. Logan teaches a SPECT apparatus including a computer for generating an image which includes a display device (Fig. 1, Items 41 and 43 respectively).

19. Logan cures the deficiency of Wainer et al. by showing that the inclusion of a display with an image processor coupled to radiation detectors is conventional and functions to enable an operator to observe the detected and processed information.

20. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a display with the computer element of Wainer et al.

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because display systems such as monitors, LCD displays, CRT displays, and the like are conventional computer components used for visualizing the operation of the computer element and enabling ease of control and operation.

21. Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over a person picking up a pen.

22. Regarding claims 26 and 27, the method described in the claims given the broadest reasonable interpretation of the language is so broad as to encompass the ordinary experience of picking up an object such as a pen.

23. The provision of the radiation source may be the light within a room provided by the Sun or a common lamp. A person seated at a desk in such a room with a pen on the desk having two eyes would then observe the light reflected off the pen and impinging on each eye. Having observed the pen, the brain then determines the direction of the pen with respect to each eye, thus establishing the first and second directions. This is necessary to enable the eyes to focus on the object being observed.

24. Once observed, and upon receiving an instruction to pick up the pen, the brain must move the hand to this object by calculating the distance and direction from hand to object at their separate state, and articulate the muscles of the body such that the hand comes into contact with the object. At this point of contact, all three directions come into conjunction.

25. One would find the method recited in claims 26 and 27 obvious because it is commonly employed in the manipulation of objects and the environment on a day to day basis. This method is conventionally referred to as triangulation.

Claim Objections

26. Claim 13 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The recites the operation mode of the computer, not a further structural feature of the apparatus.

Allowable Subject Matter

27. Claims 14 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID A. VANORE whose telephone number is (571)272-2483. The examiner can normally be reached on M-F 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (571) 272-2293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David A Vanore/
Primary Examiner, Art Unit 2881